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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/674,877      | 01/02/2001  | Gerhard Hoeffle      | 6013-192            | 5629             |

7590 01/22/2003

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| EXAMINER |
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AULAKH, CHARANJIT

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| ART UNIT | PAPER NUMBER |
|----------|--------------|

1625

DATE MAILED: 01/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/674,877

Applicant(s)  
Hoeftle, G. et al.

Examiner  
CHARANJIT AULAKH

Art Unit  
1625



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Nov. 6, 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14, 18-20, and 22-24 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 2, 9, and 10 is/are allowed.
- 6) ☒ Claim(s) 3-8, 11-14, 18-20, and 22-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 1 6) ☐ Other:

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### DETAILED ACTION

1. According to paper no. 14 filed on Nov. 6, 2002, the applicants have filed RCE of allowed application S.No. 09/674,877.
2. According to paper no. 15 filed on Nov. 6, 2002, the applicants have amended claim 7.
3. Claims 1-14, 18-20 and 22-24 are now pending in the application.

### *Claim Rejections - 35 USC § 112*

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 4, 7, 8, 11, 12, 14, 23 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 4, 7, 11, 12 and 23, the term ----alkinyl---is indefinite since its meaning is not clear.

Should it be ---alkynyl?---

Claims 8 and 24 depend indirectly or directly upon claim 4 where R2 group is directed to monocyclic aromatic or monocyclic heteroaromatic. However, claims 8 and 24 refer to aromatic and heteroaromatic. These terms are broader than the term ---monocyclic aromatic--- and monocyclic heteroaromatic---. The applicants are suggested to include ---monocyclic---before aromatic and heteroaromatic.

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Claim 14 is directed to preparing compound of formula (6) where R2 represents a monocyclic aromatic ring or monocyclic heteroaromatic ring. However, the process of this claim comprises steps disclosed in claims 9 and 10 where R2 group is either boron or a halogen. It is not clear how the steps involved in claims 9 and 10 will be helpful in preparing compounds of formula (6).

6. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 23 recites the broad recitation C1-C6 alkyl, C2-6 alkenyl, C2-6 alkynyl, halogen, and the claim also recites C1-4 alkyl, C2-4 alkenyl, C2-4 alkynyl, fluoro, chloro, bromo, iodo which is the narrower statement of the range/limitation.

### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in-

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(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

7. Claims 3-8, 12-14, 18-20 and 22-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Nicolaou ( U.S. Patent No. 6,380,394, cited on applicants form 1449 ).

Nicolaou discloses Epithilone analogs and their utility for preventing mitosis in cancer cells. The compounds no. 7002, , 7004, 7005, 7006 ( see fig. 16 ), 8000 and 8001 as well as a process for preparing compound 8001 from 8000 ( see fig. 19 ) disclosed by Nicolaou anticipate the instant claims when R2 group represents either a halogen or monocyclic heteroaromatic ring.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 4, 5, 7, 8 and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Nicolaou ( Chem.--Eur. J. 3(12) 1971-1986, 1997, cited on applicants form 1449 ).

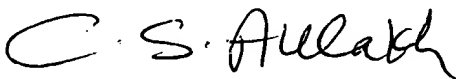
Nicolaou discloses total synthesis of oxazole- and cyclopropane-containing epothilone B analogues by the macrolactonization approach. The compound no. 30 ( see page 1973 ) disclosed by Nicolaou anticipate the instant claims when X-Y represent CH<sub>2</sub>CHOP and R2 represents a monocyclic heteroaryl group in the instant compounds of formula (6).

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chana Aulakh whose telephone number is (703) 305-4482. The examiner can normally be reached on "Monday-Thursday" from 7:30 A.M. to 6:00 P.M.

If the attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Alan Rotman, can be reached on (703) 308-4698. The fax number for this Group is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group's receptionist whose telephone number is (703) 308-1235.

  
CHARANJIT S. AULAKH  
PRIMARY EXAMINER